

## OFFICE ACTION REPORT

Application No.	2006-501549
Name of the Examiner	Mr. Yoshihiko FUNAOKA
Applied Section(s)	<input checked="" type="checkbox"/> 29I Novelty <input checked="" type="checkbox"/> 29II Inventive step <input type="checkbox"/> 29bis Prior art effect <input checked="" type="checkbox"/> 36 Description requirement <input type="checkbox"/> 39 First-to-file system <input type="checkbox"/> Others
Mailing Date of Office Action	October 23, 2008
Due Date to file Argument and/or Amendment	January 22, 2009

### Examiner's Comment in Office Action

(Refer to the list below as to Reference(s) cited)

[Rejection ground 1 based on Section 29 (1)(iii), i.e., lack of novelty]

Rejected Claims: Claims 1 to 3 and Claims 6 to 8

Reference: Ref. 1

Claims 1 to 3 and Claims 6 to 8 are disclosed in Ref. 1, particularly in Claims and Working Examples.

[Rejection ground 2 based on Section 29(2), i.e., lack of inventive step]

Rejected Claims: Claims 1 to 4 and Claims 6 to 8

References: Refs. 1 to 5

Claim 4 is an invention relating to a dispersion as claimed in Claim 1 to 3, wherein the low-molecular-weight hydrophobic substance is further limited. However, such limitation is easily applicable from the disclosure of Refs. 4 and 5. Accordingly, it is considered that Claim 4 was easily deducible from Refs. 1, 4 and 5.

Moreover, Claims 1 to 3 and Claims 6 to 8 may contain some modification comparing to the invention. However, the invention with such modification would be easily deducible based on Refs. 1 to 5. Accordingly, it is considered that Claims 1 to 3 and Claims 6 to 8 were easily deducible from Refs. 1 to 5.

[Rejection ground 3 based on Section 36 (6)( i), i.e., insufficient description]

Claims 1 to 8 relates to dispersion, a process, and paper with broad claimed scopes. With respect to the claimed scope, only limited number of experiments are conducted as working examples. Namely, it is not clear whether the dispersion, process or paper covered by the broad claims has the same result and the function with those in the working examples.

Accordingly, Claims 1 to 8 are not described in the specification.

#### List of Cited References

1. JP-A 03-210349 .....English abstract attached
2. JP-A 2001-089664 .....English abstract attached
3. WO 00/50473                      JP-A 2003-509519)
4. JP-A 03-152296.....Canadian Patent 2,029,220
5. JP-A 2002-502893..... US Patent 6,727,318 B1

#### Our Comment

Please be advised that Claims 1 to 8 are now on file, which corresponds to those in "the translation of the new pages for the national phase" attached to your letter of May 25, 2005.

Please note that pending Claim 5 does not have any novelty/inventive step rejection.

On the other hand, all the claims were rejected based on the description problem.

We could not find an English or German counterpart of Refs. 1 or 2. Therefore, please refer to the followings, and let us know if it is insufficient for you.

Ref. 1 relates to an ionomer dispersion, namely an aqueous dispersion containing a partially neutralized ethylene-acrylate copolymer (A) and a partially neutralized ethylene-methacrylate copolymer (B), at a predetermined mixing ratio. For each ionomer, the specification discloses that the content of acrylate or methacrylate in copolymer is in the range of 5 wt.% to 45 wt.%. That could be an overlap with the present invention. According to Ref. 1, a coating from the mixture of the ionomer is free from tackiness, and from clack even for a thick coating.

Moreover, Ref. 2 discloses an aqueous dispersion comprising a mixture of ionomers which is similarly to Ref. 1, and a protein as an antistatic agent. The dispersion of Ref. 2 is also used for a paper coating material.

Although the Examiner asserts that Claim 1 is disclosed in Ref. 1, we do not see a directly corresponding description as to at least one hydrophobic low molecular weight organic substance. Ref. 1 only discloses the addition of water soluble resins such as melamine, organic or inorganic thickening agent including polyvinyl alcohol and silicon dioxide, surfactants, water soluble metal salts, antimoulding agents, UV absorbing agents, heat-resistant agent, blowing agent, fillers or the like, to the dispersion.

As to the lack of inventive step of Claim 1, the Examiner cites Refs. 1, 4 and 5. In Ref. 4, a paper-composition including distyryl compounds as a brightener is disclosed. A plastic dispersion based on acrylate is disclosed in Ref. 4, but it seems that the copolymer of the invention is not directly disclosed therein as a component in the paper-composition of Ref. 4.

Ref. 5. relates to a process for preparing dye-comprising aqueous polymer dispersions which can contain a brighter, bistyrylbenzene and benzoxazole (Ref. 1, columns 11 to 12).

We think it is not easy to traverse the rejection based on the combination of Ref. 1, 4 and 5, in view of the practice before the JPO, when all the structures in

Claim 1 are disclosed in any of the combined references. In this case, it is very important to argue the difference of structure and/or effect between the mixture of the neutralized ethylene-acrylate copolymer (A) and partially neutralized ethylene-methacrylate copolymer (B) of Ref. 1 and one or more of the copolymer of the present invention. Moreover, if it is possible to introduce a remarkable structural difference of the invention against the references, such amendment would be convincing.

For example, we understand that none of Refs. 1, 4 and 5 are not trying to exclude the use of surfactant or emulsifier. If it is acceptable for you to disclaim the use of emulsifier or protective colloids, that might help.

The Examiner further rejects claims based on insufficient description. It would be necessary to restrict claim 1 to the extent where all the products in the new claim have the same or similar effect as that shown in the working examples. In that case, it is preferable to submit the proof for showing the same/similar effect, or at least to submit a strong argument.